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BANNER & WITCOFF LTD.,
ATTORNEYS FOR MICROSOFT
1001 G STREET, N.W.
ELEVENTH STREET
WASHINGTON, DC 20001-4597

EXAMINER

NGUYEN, FRANCIS N

ART UNIT	PAPER NUMBER
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2674

DATE MAILED: 06/04/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/940,900

Applicant(s)

HINCKLEY ET AL.

Examiner

FRANCIS NGUYEN

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-52 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 13-20, 31-40 and 50-52 is/are allowed.
- 6) ☒ Claim(s) 1-4, 10-12, 21-30, 41, 46 is/are rejected.
- 7) ☒ Claim(s) 5-9, 42-45 and 47-49 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08/29/01 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>2-3</u> . | 6) <input type="checkbox"/> Other: |

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DETAILED ACTION

Specification

1. The disclosure is objected to because of the following informalities: missing information of copending applications in pages 6 and 8.

Appropriate correction is required.

Claim Objections

2. Claims 1, 29 are objected to because of the following informalities: incorrect word "main" (page 18, claim 1, line 5), incorrect word "housing" (page 18, claim 29, line 1).

Appropriate correction is required.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 41, 46 are rejected under 35 U.S.C. 102(b) as being anticipated by Pham (US Design Patent Des. 387,340).

As to claim 41, Pham teaches a keyboard comprising an alphanumeric section (keyboard with alphanumeric section shown in figure 1; and

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an elongated touch-sensitive strip disposed within said alphanumeric section (keys Page up/Page Down /Esc/.../Space Bar located between the two portions of alphanumeric section shown in figure 1).

As to claim 46, the keyboard of claim 41, further comprising an editing section (keys Insert /Delete/.../Page Up/Page Down shown in figure 1) and a numeric section (numeric section shown in figure 1) , said editing section and said numeric section being laterally disposed from said alphanumeric section .

4. Claims 1, 3-4, 11, 21-23, 26-28 are rejected under 35 U.S.C. 102(e) as being anticipated by Schein et al. (US Patent 6,075,575).

As to claim 1, Schein et al. teaches a touch-sensitive device for scrolling a document on a display screen (remote control device 2 shown in figure 1, column 4, lines 51-64), said device comprising: a central scrolling area extending a longitudinal axis (vertical scroll mechanism is rolling cylinder 24, column 5, lines 15-22) and first and second end scrolling areas positioned along the longitudinal axis on opposed sides of the central scrolling area (buttons 32 and 34 are located on opposite sides of scrolling mechanism 26 in figure 2) , said first and second scrolling areas being physically separate from the central scrolling area (buttons 32 and 34 are physically separate from central scrolling area 26 , as shown in figure 2).

As to claim 3, Schein et al. teaches a housing with first, second and third opening that frames the central , first end, and second end scrolling areas (casing 4 comprising cursor control assembly 8 as shown in figure 2).

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As to claim 4, the touch-sensitive device of claim 3, said housing further having members extending across scrolling regions to physically divide said central and first end scrolling areas, and said central and second end scrolling areas (scrolling mechanism 26 is physically divided from button 32 as shown in figure 2, therefore the members extending across scrolling regions are inherent) and said central and second end scrolling areas (scrolling mechanism 26 is physically divided from button 34 as shown in figure 2, therefore the members extending across scrolling regions are inherent).

As to claim 11, the touch-sensitive device of claim 1, wherein said first end and second scrolling areas are generally circular in shape (buttons 32 and 34 are generally hemispherical in shape as shown in figure 2).

As to claim 21, Schein et al. discloses a touch-screen device for scrolling a document on a display screen (remote control device 2 shown in figure 1), said device comprising: a scrolling area extending along a longitudinal axis (scrolling mechanism 26 shown in figure 2), and opposed first and second ends (buttons 32 and 34 are located on opposite ends of scrolling mechanism 26 as shown in figure 2), said first and second ends being rounded (buttons 32 and 34 being rounded as shown in figure 2).

As to claim 22, the touch-sensitive wherein said first and second ends each having an extreme end, said extreme ends being rounded (buttons 32 and 34 being rounded as shown in figure 2).

As to claim 23, the touch-sensitive device of claim 22, further comprising a housing with an opening that frames the scrolling area (casing 4 comprising cursor control assembly 8 as shown in figure 2).

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As to claim 26, the touch-sensitive device of claim 21, further comprising first and second scroll input surfaces positioned adjacent to said scrolling area, and on opposing sides of and spaced from said scrolling area in a direction perpendicular from said longitudinal axis, said first and second input surfaces enabling the scrolling of the image in opposite directions along a first axis (buttons 32 and 34 are input surfaces in figure 2, enabling cursor moving in horizontal direction , column 5, lines 38-40).

As to claim 27, Schein et al. teaches a touch-sensitive device for scrolling a document on a display screen, said device comprising a scrolling area extending along a longitudinal axis enabling the scrolling of a document in a first direction, and first and second signal scroll input surfaces positioned immediately adjacent to said scrolling area (buttons 32 and 34 are input surfaces shown in figure 2), and on opposing sides of and spaced from said scrolling area in a direction perpendicular from said longitudinal axis, and first and second input surfaces enabling the scrolling of a document in a direction perpendicular from the first direction (scrolling in horizontal direction, column 5, lines 38-40).

As to claim 28, the device of claim 27, further comprising a housing with first, second and third openings that frames the scrolling area, and the first and second input surfaces respectively(casing 4 comprising cursor control assembly 8 as shown in figure 2).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

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having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2, 10, 12, 24-25, 29, 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schein et al.

As to claim 2, Schein et al. fails to expressly teach the device of claim 1, wherein said device is part of a keyboard including an alphanumeric section, said scrolling area being disposed within said alphanumeric section. Note that Schein et al. teaches a remote control device, which is an input device like keyboard. It would have been obvious to a person of ordinary skill in the art at the time of the invention to utilize the scrolling mechanism taught by Schein et al., then implement in a keyboard, since both remote control device and keyboard are input devices, to obtain the apparatus Schein et al. modified, because it would allow the user to perform scrolling a document on the screen while operating the keyboard without having to spend more time to reach other input devices.

As to claim 10, Schein et al. fails to expressly teach first end and second end scrolling areas generally circular in shape. Schein et al. teaches buttons 32 and 34 hemispherical in shape. It is obvious to a person of ordinary skill in the art to utilize the apparatus taught by Schein et al., then modify the shapes of buttons 32 and 34 to a design choice of circular shape (since the function for scrolling remains the same, because it would adapt to the shape of finger surface of contact).

As to claim 12, Schein et al. fails to expressly teach first end and second end scrolling areas generally triangular in shape. Schein et al. teaches buttons 32 and 34 hemispherical in shape. It is obvious to a person of ordinary skill in the art to utilize the apparatus taught by Schein et al., then modify the shapes of buttons 32 and 34 to a design choice of triangular shape (since the

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function for scrolling remains the same), because it would adapt to the shape of finger surface of contact.

As to claim 24, Schein et al. fails to expressly teach the touch-sensitive device of claim 21, wherein said device is part of a keyboard including an alphanumeric section, said scrolling area being disposed within said alphanumeric section. Note that Schein et al. teaches a remote control device, which is an input device like keyboard. It would have been obvious to a person of ordinary skill in the art at the time of the invention to utilize the scrolling mechanism taught by Schein et al., then implement in a keyboard, since both remote control device and keyboard are input devices, to obtain the apparatus Schein et al. modified, because it would allow the user to perform scrolling a document on the screen while operating the keyboard without having to spend more time to reach other input devices.

As to claim 25, Schein et al. teaches scrolling mechanism 26 in cylindrical shape but fails to teach that said scrolling area is generally hourglass shaped. It is obvious to a person of ordinary skill in the art at the time of the invention to utilize the apparatus of Schein et al. and modify the shape of scrolling area to a design choice of hourglass shape (since the function of scrolling remains the same) because it would adapt well to user finger surface of contact.

As to claim 29, Schein et al. fails to expressly teach the touch-sensitive device of claim 27, wherein said device is part of a keyboard. Note that Schein et al. teaches a remote control device, which is an input device like keyboard. It would have been obvious to a person of ordinary skill in the art at the time of the invention to utilize the scrolling mechanism taught by Schein et al., then implement in a keyboard (since both remote control device and keyboard are input devices), to obtain the apparatus Schein et al. modified, because it would allow the user to

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perform scrolling a document on the screen while operating the keyboard without having to spend more time to reach other input devices.

As to claim 30, the device of claim 29, wherein said keyboard includes an alphanumeric section (inherent in a conventional keyboard) and said scrolling area being disposed within said alphanumeric section (it is obvious to locate scrolling area within reach of user fingers in order to perform scrolling a document during typing operation due to productivity).

Allowable Subject Matter

6. Claims 13-20, 31-40, 50-52 are allowed.

7. Claims 5-9, 42-45, 47-49 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter:

As to claims 5-9, none of prior art teaches first and second scroll input surfaces positioned immediately adjacent to said scrolling area, and on opposing sides of and spaced from said central scrolling area in a direction perpendicular from said longitudinal axis.

As to claims 13-20, none of prior art discloses a central scrolling area extending along a longitudinal axis having a width in a direction perpendicular to the longitudinal axis, and a first and second end scrolling areas positioned along the longitudinal axis on opposed sides of

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the central scrolling area, said first and second end scrolling areas having a width that differs from the width of the central scrolling area.

As to claims 31-40, none of prior art discloses tactile feedback means located between the distal ends for providing tactile feedback for assisting in the location of the first and second ends.

As to claim 42, none of prior art teaches an elongated touch-sensitive strip being disposed between G key and B key.

As to claim 43, none of prior art teaches an elongated touch-sensitive strip disposed between T key and Y key.

As to claim 44, none of prior art teaches an elongated touch-sensitive strip disposed immediately behind a space bar.

As to claim 45, none of prior art teaches an elongated touch-sensitive strip being (a) disposed between G key and B key, (b) disposed between T key and Y key, and (c) disposed immediately behind space bar.

As to claims 47-48, none of prior art teaches an elongated touch-sensitive strip extends a longitudinal axis that is angularly displaced from the front-to-back direction.

As to claim 49, none of prior art teaches an elongated touch-sensitive strip extends along a longitudinal axis that is angularly disposed relative to the keyboard by an amount that is approximately the same and the angular disposition of the first portion.

As to claims 50-52, none of prior art teaches a physical divider disposed between first and second touch-sensitive devices, said divider having a contoured edge immediately adjacent the elongated touch sensitive input surface of at least one of said first and second touch-sensitive devices.

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Conclusion

8. The prior art of made of record is not relied upon, but pertinent to Applicant's disclosure:

US Patent	5,825,349	Meier et al.
US Patent	6,014,140	Strand
US Patent	5,952,995	Barnes
US Design Patent	Des. 370,477	Chen
US Design Patent	D451,517 S	Hayes et al.

Reference Meier et al. is made of record as it discloses a method and apparatus for intelligent scrolling.

Reference Strand is made of record as it discloses a method and system for locating and displaying the position of a cursor.

Reference Barnes is made of record as it discloses scroll indicating cursor.

Reference Chen is made of record as it discloses a keyboard with keys between alphanumeric section.

Reference Hayes et al. is made of record as it discloses a keyboard with scrolling mechanism.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **FRANCIS N NGUYEN** whose telephone number is **703 308-8858**. The examiner can normally be reached during hours 8:00 AM- 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **RICHARD A HJERPE** can be reached at 703 305-4709.

Any response to this action should be mailed to:

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Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

(703) 872-9314 (for Technology Center 2600 only)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive,
Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding
should be directed to the Technology Center 2600 Customer Service whose telephone number is
(703) 306-0377.

FN
May 30th, 2003



FRANCIS N NGUYEN
Examiner
Art Unit 2674